

B<sup>5</sup>  
determined by SDS-PAGE with FVEGF121 as a standard. Solutions of all VEGF fusion proteins were supplemented with glycerol to a final concentration of 10% v/v and stored in aliquots at -20°C. Schematic representations of the VEGF fusion proteins comprising the S-peptide or S-protein fragment of ribonuclease linked to the N-terminus of the corresponding vascular endothelial growth factor via a peptide spacer are presented in FIG. 2.

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Please REWRITE the paragraph at page 36, lines 1-3, as follows:

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5. Expression and Purification of Recombinant Protein HuS/C Containing a Mutant 18-125 Amino Acid Fragment of Human Ribonuclease A (Ribonuclease I) with S(19,20)A and S123C Amino Acid Substitutions.
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IN THE CLAIMS:

Please **CANCEL** claims 4, 12, 18, 26, 34, and 42 without prejudice or disclaimer.

Please **REWRITE** claims 1, 8, 9, 10, 11, 14, 15, 22, 23, 24, 25, 28, 30, 31, 33, 38, 39, 40, and 41 as follows:

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- B<sup>7</sup>  
1. (Amended) A molecular delivery vehicle for delivery of therapeutic, diagnostic, or research compounds to a target, comprising:  
(a) a carrier for carrying said compounds;  
(b) an adapter covalently linked to said carrier; and  
(c) a recombinant targeting fusion protein comprising a recognition portion and a targeting portion, said

B<sup>7</sup>

recognition portion consisting essentially of a recognition peptide, and capable of binding to said adapter, said targeting portion capable of binding to said target.

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8. (Amended) The molecular delivery vehicle of claim 1, wherein said adapter is selected from the group consisting of a wild type or mutant S-protein fragment of bovine ribonuclease A or ribonuclease I, cellulose, calmodulin, and streptavidin.

B<sup>8</sup>

9. (Amended) The molecular delivery vehicle of claim 1, wherein said targeting portion of said recombinant targeting fusion protein is selected from the group consisting of cytokines, growth factors, peptide hormones, antibodies, fusion proteins, and combinations thereof.

10. (Amended) The molecular delivery vehicle of claim 1, wherein said targeting portion of said recombinant targeting fusion protein is vascular endothelial growth factor 121.

11. (Amended) The molecular delivery vehicle of claim 1, wherein said recognition portion of said recombinant targeting fusion protein is an S-peptide fragment of bovine ribonuclease A or ribonuclease I.

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B<sup>9</sup>

14. (Amended) The molecular delivery vehicle of claim 1, wherein said recombinant targeting fusion protein further

comprises a spacer peptide positioned between said recognition portion and said targeting portion.

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15. (Amended) A pharmaceutical composition, comprising:
- (1) a pharmaceutically acceptable carrier; and
  - (2) a pharmaceutically effective amount of a molecular delivery vehicle for delivery of therapeutic, diagnostic, or research compounds to a target, comprising:
    - (a) a carrier for carrying said compounds;
    - (b) an adapter covalently linked to said carrier; and
    - (c) a recombinant targeting fusion protein comprising a recognition portion and a targeting portion, said recognition portion consisting essentially of a recognition peptide, and capable of binding to said adapter, said targeting portion capable of binding to said target.
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- B<sup>10</sup>
22. (Amended) The pharmaceutical composition of claim 15, wherein said adapter is selected from the group consisting of a wild-type or mutant S-protein fragment of bovine ribonuclease A or ribonuclease I, cellulose, calmodulin, and streptavidin.

23. (Amended) The pharmaceutical composition of claim 15, wherein said targeting portion of said recombinant targeting fusion protein is selected from the group consisting of cytokines, growth factors, peptide hormones, antibodies, fusion proteins, and combinations thereof.

- B<sup>10</sup>
24. (Amended) The pharmaceutical composition of claim 15, wherein said targeting portion of said recombinant targeting fusion protein is vascular endothelial growth factor 121.
25. (Amended) The pharmaceutical composition of claim 15, wherein said recognition portion of said recombinant targeting fusion protein is an S-peptide fragment of bovine ribonuclease A or ribonuclease I.
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- B<sup>11</sup>
28. (Amended) The pharmaceutical composition of claim 15, wherein said recombinant targeting fusion protein further comprises a spacer peptide positioned between said recognition portion and said targeting portion.
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30. (Amended) An article of manufacture comprising packaging material and a pharmaceutical agent contained within said packaging material, wherein said pharmaceutical agent is therapeutically effective for treating pathophysiological conditions that depend on cells that can be detected or affected via target-mediated delivery of therapeutic or diagnostic compounds and wherein said packaging material comprises a label which indicates that the pharmaceutical agent can be used for treating pathophysiological conditions that depend on cells that can be detected or affected via target-mediated delivery of therapeutic or diagnostic compounds, and wherein said pharmaceutical agent comprises a pharmaceutically effective amount of a molecular delivery vehicle for delivery of therapeutic, diagnostic, or research compounds to a target, comprising:

- (a) a carrier for carrying said compounds;
- (b) an adapter covalently linked to said carrier; and
- (c) a recombinant targeting fusion protein comprising a recognition portion and a targeting portion, said recognition portion consisting essentially of a recognition peptide, and capable of binding to said adapter, said targeting portion capable of binding to said target;

in a pharmaceutically acceptable carrier.

31. (Amended) A method for delivering therapeutic, diagnostic, or research compounds to a target in a patient, comprising the steps of:

administering a pharmaceutical composition to said patient, said pharmaceutical composition comprising:

- (1) a pharmaceutically acceptable carrier; and
- (2) a pharmaceutically effective amount of a molecular delivery vehicle for delivery of compounds to a target, comprising:

- (a) a carrier for carrying said compounds;
- (b) an adapter covalently linked to said carrier; and
- (c) a recombinant targeting fusion protein comprising a recognition portion and a targeting portion, said recognition portion consisting essentially of a recognition peptide, and capable of binding to said adapter, said targeting portion capable of binding to said target; and

permitting said molecular delivery vehicle to contact said target to deliver said compounds to said target in said patient.

*B<sup>13</sup>* 33. (Amended) The method of claim 31, wherein said target is a cell surface receptor or a cell surface antigen.

38. (Amended) The method of claim 31, wherein said adapter is selected from the group consisting of wild-type or mutant S-protein fragment of bovine ribonuclease A or ribonuclease I, cellulose, calmodulin, and streptavidin.

*B<sup>14</sup>* 39. (Amended) The method of claim 31, wherein said targeting portion of said recombinant targeting fusion protein is selected from the group consisting of cytokines, growth factors, peptide hormones, antibodies, fusion proteins, and combinations thereof.

40. (Amended) The method of claim 31, wherein said targeting portion of said recombinant targeting fusion protein is vascular endothelial growth factor 121.

41. (Amended) The method of claim 31, wherein said recognition portion of said recombinant targeting fusion protein is an S-peptide fragment of bovine ribonuclease A or ribonuclease I.